

CHELMSFORD
RURAL DISTRICT COUNCIL.

ANNUAL REPORT
OF THE
MEDICAL OFFICER of HEALTH

(JOHN F. MACDONALD, M.D., D.P.H.)

FOR

■ ■ 1914. ■ ■

CHELMSFORD :

PRINTED BY JOHN DUTTON, 8, TINDAL STREET.

MDCCCCXV.

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CHELMSFORD RURAL DISTRICT.



Medical Officer of Health - John F. Macdonald, M.D., D.P.H.

Engineer and Surveyor - James Dewhirst, A.M.I.M.E.

Assistant „ -

Sanitary Inspector - - W. Edser (Certificated).

Clerk : A. S. Duffield, Esq., Chelmsford.

Offices : Waterloo Lane, Chelmsford.

GENERAL INFORMATION.

POSITION. Almost in the centre of the County of Essex, and completely surrounding the County Town (the Borough of Chelmsford).

SIZE. The district is an irregular oblong, about 14 miles long (North to South) and 11 miles wide. The area, exclusive of a little inland water, is 82,772 acres.

PHYSICAL AND GENERAL CHARACTERS. The whole area drains into the River Chelmer and its tributaries, and is gently undulating. The entire district is on the London Clay, but this is only exposed in the southern half ; elsewhere it is covered with gravel or boulder clay or both. The highest part is Danbury Hill, which, at the Church, is 366ft. above ordnance datum. Fortunately, this elevation is capped with water-bearing gravel, the springs from which are utilized for supplying several villages with water. The lowest point is in the Chelmer valley, at the extreme east of the district, where the ground level is only 44ft. above ordnance datum. The whole district is agricultural, and the only common land is at Danbury, Galleywood and Mill Green (Ingatestone). The area of this waste land is comparatively small.

POPULATION. At the 1901 census this was 23,800, but in 1907 an area with a population 3075 (in 1901) was taken from the District and added to the Borough. At the 1911 census the population was as under :—

In the Great Waltham sub-registration

district	...	...	...	7,135 in 10 parishes
„ Chelmsford		„	...	3,719 in 3 „
„ Great Baddow		„	...	5,141 in 5 „
„ Ingatestone		„	...	6,797 in 11 „
	Total	...		<hr/> 22,792 in 29 <hr/>

The district is essentially residential and agricultural, but many artizans employed in Chelmsford reside in the villages surrounding the Borough.

SANITARY ADMINISTRATION. The Rural District Council consists of 32 elected members. The Council meets on alternate Tuesdays, after the sitting of the Board of Guardians. There are several committees dealing with Public Health matters, each of which meets once a month, on the Friday preceding a Council Meeting, unless, as occasionally occurs, there is no business to transact. The Committee's reports are presented at the next Council meeting.

LIST OF COMMITTEES.

Finance Committee, Buildings, Works and Sanitary Committee, of which the Rev. C. Edmunds is chairman, comprises 10 members.

Danbury and six other parishes Waterworks Committees.

Writtle and Ingatestone Drainage and Water Supply Committee.

Great Baddow Drainage and Water Supply Committee.

Broomfield Drainage and Water Supply Committee.

The Housing Committee.

The Council is represented on the :—

Chelmsford Joint Sewerage Committee.

Chelmsford Joint Hospital Board.

South-East Essex United Districts (Medical Officer of Health) Committee.

The Council Offices in Waterloo Lane consist of a large Committee room, two rooms for the Surveyor's Department, one room for the Sanitary Inspector and Highways Surveyor respectively, one waiting room, and one room fitted up as office and laboratory for the Medical Officer of Health and for which the Joint Committee pay an annual rent of £25.

Printed agenda papers are sent out before each meeting of the Council, and the minutes of all the Council Meetings are printed and distributed.

URBAN POWERS. The Council has the following Urban Powers :—

Conferred by the L.G.B., April 8th, 1880, under Public Health Act, 1875.

Section.	Subject.	Parishes to which powers apply.
20.	... Plans of Sewers. (Special expenses)	Great Baddow, Ingate- stone and Fryerning. Widford, Great and Little Waltham.
26.	... Building over Sewers	
44.	.. "Cleansing" Bye-laws.	The whole district.
45.	... Receptacles for rubbish.	Writtle.
47. ²⁻³	... Nuisances on premises.	Ingatestone and Fry- erning.
157. ²⁻³⁻⁴	... Building Bye-laws. ...	The whole district
158.	... Building Bye-laws, contravention of	„ „

- 169.^{2.3}, 170. ... Slaughterhouses, regulation of. ... Great Baddow, Boreham, Broomfield, Buttsbury, Danbury, Good Easter, West Hanningfield, Ingatestone and Fryerning, Gt. Leighs, Pleshey, Roxwell, Stock, Great and Little Waltham, Widford, Woodham Ferris, Writtle, and Springfield Rural.

Conferred by order of L.G.B., 20th July, 1887.

42. ... Removal of house refuse, etc. ... Great Baddow, s.d.d., Ingatestone and Fryerning, Springfield.
(declared special expenses, 26th January, 1900).

Conferred by order of L.G.B., June 3rd, 1892.

- 157.¹ ... Bye-laws relating to width of streets. ... The whole district.
161.¹ ... Lighting streets. ... Great Baddow, Ingatestone and Fryerning, Writtle, Widford (1909).

Conferred by L.G.B., January 18th, 1894.

- 112, 113, 114, Offensive trades, regulation of. ... Great Baddow, s.d.d., Broomfield, Ingatestone and Fryerning, Great and Little Waltham, Writtle.
115 (special expenses)

Conferred February 28th, 1895.

197. ... Provision of offices. ... The whole district.

Conferred March, 1896.

20. ... Map of sewerage system (special expenses). ... Writtle.
25. ... Building houses without drains (special expenses). Great Baddow s.d.d., Ingatestone & Fryerning, Widford, Writtle.
- 26.¹ ... Building houses over sewers (special expenses)... ... Writtle.
39. ... Providing public necessities (special expenses). { Great Baddow, s.d.d., Broomfield, Stock,
- 47.² ... Stagnant water under houses (special expenses). { Great and Little Waltham, Writtle.
- 47.³ ... Allowing cesspools, &c., to overflow. (special expenses). Great Baddow s.d.d., Broomfield, Stock, Great and Little Waltham, Writtle, Ingatestone and Fryerning, Widford.
- 160.³ ... Ruinous buildings. ... The whole district. (special expenses).

Conferred January 26th, 1900.

42. ... Removal of house refuse, &c. Broomfield, Little Waltham, Great Waltham (Mar. 8th, 1902), Writtle s.d.d. and Widford (24th June, 1914).

Conferred October 12th, 1905.

- 26.¹ ... Building houses over
sewers (special ex-
penses). Writtle s.d.d.

Conferred August 23rd, 1907.

- 161.¹ ... Street Lighting. ... Margaretting.
(special expenses).... Widford (24th June,
1914).

Adoptive Acts.

- | | |
|---|---|
| Infectious Disease Notifica-
tion Act, 1889 | Came into force, 1st January,
1890. |
| Infectious Disease (Pre-
vention Act), 1890. | Came in force, April 1st, 1891. |
| Public Health Acts Amend-
ment Act, 1890 (Part III). | Came in force, April 1st, 1891.
For whole district. |
| | Relating to Bye-laws as to (1)
Water closets, (2) structure of
floors and height of rooms, (3)
paving of yards, (4) secondary
means of access for removal of
house refuse. |
| Public Health Acts Amendment
Act, 1907. | Adopted June, 1912.
For the whole district. |
| Relating to Streets and
Buildings. | Secs. 15, 16, 20, 22, 23, 24, 27, 29,
30, 31, 32, and 33. |
| Sanitary provisions. ... | Secs. 34, 35, 36, 37, 38, 43, 44, 45,
46, 48, 49. |
| Infectious Diseases. ... | Secs. 52, 53, 54, 55, 56, 57, 58, 59,
60, 62, 63, 64, 65, 67. |
| | For Great Baddow s.d.d., Ingatestone and
Fryerning, Widford and Writtle s.d.d. |
| Sanitary provisions. ... | Secs. 39, 40, 41, and 42. |

Great Baddow Special Drainage District formed by Local Government Board Provisional Order, April 29th, 1876.

Writtle Special Drainage District formed by Local Government Board Provisional Order, July 9th, 1898.

Bye-laws and Regulations Adopted.

- | | |
|---|---|
| 1. Relating to the cleansing of footways, removal of house refuse, cleansing cesspools, &c. | Applicable to all the district except Great Baddow, Great and Little Waltham, Broomfield and Writtle, 1894. |
| 2. Relating to Nuisances. ... | Whole district, 1894. |
| 3. Relating to New Streets and Buildings. | Apply to whole district. Adopted 1914 the older 1903 series being repealed. |
| 4. Relating to Slaughter-houses. | Apply to all districts save a few of smaller parishes, 1894. |
| 5. Relating to Offensive Trades. | Apply to Great Baddow s.d.d., Broomfield, Ingatestone and Fryerning, Great and Little Waltham, and Writtle, 1894. |
| 6. Regulations under Dairies and Cowsheds Order. | Apply to whole district. Adopted in 1906 to replace older regulations. |
| 7. Relating to Tents, Vans, and Sheds. | Adopted 1909, and apply to the whole district. |
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FACTORIES, WORKSHOPS, TRADES, &c. The only factories in the district are a few flour mills. The workshops and trades are all directly or indirectly connected with agriculture.

PUBLIC SCAVENGING. Pail closets are scavenged by contractors in Broomfield, Great and Little Waltham and Battlesbridge. House refuse is removed by contractors in Great Baddow, Ingatestone and Widford. Cost of Scavenging (1914) :—

Great Baddow* £70, Ingatestone* £60, Widford £20,
Great Waltham £23, Little Waltham £17 12s.,
Broomfield* £72, Battlesbridge £13.

*Owing to the large number of troops billeted in these districts the following additional cost has been incurred, Great Baddow £11 9s., Ingatestone £9 16s., Broomfield £1 6s.

SCHOOLS. The medical inspection of school children is undertaken by officials appointed by the County Council.

WORKS OWNED AND CONTROLLED BY THE COUNCIL.

Public Water Supplies.

1. GREAT BADDOW.—These works supply Great Baddow s.d.d. and Springfield, in the Borough of Chelmsford. The water is derived in part from springs and in part from a deep well. The water is pumped by means of gas engines into a tank at a sufficient elevation to command the district. From the deep well the water is raised to the ground surface by means of an air-lift pump. The yield of springs and well is 200,000 gallons per day.

2. INGATESTONE AND FRYERNING.—These works derive water from the chalk, the well and boring being 800 feet deep. The water is pumped by means of a suction gas plant, deep well pumps, and ram pumps to a reservoir on higher ground. The water is soft and excellent. There are about 270 houses supplied.

3. DANBURY DISTRICT.—Water from two springs at the edge of Danbury Common, on the southern side of the gravel-capped Danbury Hill. A portion flows into a large covered reservoir, and is then pumped into a tank on a tower at the top of the hill to supply Danbury, Little Baddow and a few houses in Woodham Walter in Maldon R.D. The remainder flows by gravitation, assisted during the day by pumping, to supply the parishes of Woodham Ferris, Rettendon, Runwell, and part of Sandon. There is a balancing reservoir on the top of Rettendon Hill. The water is soft and of good quality. The yield of the springs is about 80,000 gallons per day.

4. WRITTLE.—These works supply the Writtle special drainage district. The water is derived from the Thanet sands by means of a bored well. An air-lift pump, with oil engines raises the water to a tank on the ground level. It is then forced through a mechanical filter into a tank upon a brickwork tower, from which it flows by gravitation to supply the village. The maximum demand during normal conditions is under 100,000 gallons per week.

5. GREAT WALTHAM.—A spring supply. The water is raised by a ram to a small tank on iron columns from which it flows by gravitation to standpipes in the village.

6. LITTLE WALTHAM.—A spring supply piped direct from a small collecting chamber to the village. Houses are supplied chiefly from standpipes.

7. BROOMFIELD.—The water is obtained by two bored wells each 320 feet deep. The pumping machinery is in duplicate, each set being capable of pumping 5,000 gallons per hour to the water towers. The machinery is driven by two engines, using gas manufactured at the works (by such gas plants in duplicate). Each of the two steel water towers is surmounted by a steel tank of 8,800 gallons capacity. From the tanks the water flows by gravitation to supply the village.

The water is derived from the Thanet sands and is of excellent quality. The mains are of cast iron and consist of 178 yards of 5 inches, 2715 of 4 inches and 1496 of 3 inches.

Sewerage Systems.

1. GREAT BADDOW S.D.D. AND WIDFORD.—The sewers are connected with the Chelmsford mains, and the sewage is dealt with upon a farm of over 100 acres situated in the rural part of Springfield parish. The control of the farm is in the hands of a Joint Sewerage Committee.

2. WRITTLE.—The sewerage system is recent. The sewage is dealt with on coke contact beds and land (about four acres). The process gives satisfactory results.

3. INGATESTONE.—The sewage of this village is dealt with upon 11 acres of land. By constant attention good results are obtained.

4. GREAT WALTHAM VILLAGE.—Each of the two sewers communicates with a small tank and gravel filter. The results are not always satisfactory.

Hospital Accommodation.

Accommodation is provided for both the Borough and the Rural District by the Chelmsford Joint Hospital Board. The Hospital for ordinary infectious diseases situated in Great Baddow consists of administrative block, a 14-bed pavilion for Scarlet Fever cases, a 7-bed pavilion for Diphtheria cases and the necessary out-houses (wash-house, laundry, disinfecter, mortuary, etc.). There is no permanent accommodation for Enteric Fever patients.

A 4-bed Small-pox Hospital (wood and iron) situated at Galleywood, is at present utilised by the County Council for early cases of Tuberculosis.

The Staff of the Hospitals is separate and distinct from that of the Rural District.

REPORT
OF THE
MEDICAL OFFICER OF HEALTH,
FOR THE YEAR, 1914]

To the Chairman and Members of the
Rural District Council.

SIR AND GENTLEMEN,

I have the honour to present for your consideration my first annual report on the health and sanitary circumstances of your district. During the latter part of the year, owing to the influx of troops, the population of your district has been much above the normal. This lead to inevitable overcrowding, but by the close co-operation existing between the military and your sanitary staff the evil effects have been greatly minimised.

Detailed information relating to the billeting of troops in Writtle is given as an appendix to this report.

For the sympathetic consideration and assistance received since I took up duty on 1st July, 1914, I beg to thank the Council.

To Mr. Dewhirst, Engineer and Surveyor, and to Mr. Edser, Inspector, I am much indebted for assistance in the preparation of this report.

I beg to remain, gentlemen,

Your obedient servant,

JOHN F. MACDONALD.

23rd February, 1915.

A. NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT

1. PHYSICAL FEATURES.—These are referred to in the first portion of the report.

2. SOCIAL CONDITIONS.—The major portion of the population is engaged in agricultural pursuits. A considerable number of persons employed in London live in the district, the railway facilities leaving little to be desired. There are no large works within the area, but many of the workmen employed in the large manufactories in Chelmsford reside in the rural district, and this has increased the difficulties associated with the housing problem. The number of houses in the Borough suitable for the artizan class has been recently largely increased and this must have caused many workmen, who formerly resided outside the Borough, to now live in it.

The population enumerated in the district at the census of 1901 (exclusive of the area since added to the Borough of Chelmsford) was 20,725, at the 1911 census 22,791, and the estimated population for the middle of 1914 based on the intercensal increase was 23,503, which is 30 more than if based upon the number of habitation certificates granted during the year, and the average number of persons per house at the 1911 census (the former being 61 and the latter 4.1).

POOR LAW RETURNS.

The following information with reference to relief granted has been obligingly furnished to me by the Clerk :—

	Indoor paupers relieved.	Outdoor paupers relieved.	Total.	Vagrants relieved.
1912—1913.				
To Sept. 30th ...	410.	563. ...	973.	3,675.
To Mar. 31st ...	413.	615. ...	1,028.	3,061.
1913—1914.				
To Sept. 30th ...	409.	556. ...	965.	3,197.
To March 31st ...	352.	526. ...	878.	2,258.
1914.				
1st Jan. to 30th June	411.	519. ...	930.	2,738.
1st July to 31st Dec.	362.	475. ...	837.	1,864.

The comparison for the 1st and 2nd half of the year, 1914, shows that during the latter period (5 months of War) there was a slight decrease in the number of outdoor and indoor paupers relieved. The large decrease in the number of

vagrants was mainly due to the vagrant wards being closed for a period of the 2nd half of the year.

By 31st December, 1914, no application for relief had been received by the Committee appointed to deal with any distress arising in consequence of the outbreak of war.

	Maintenance in Workhouses.	Cost per head.	Out relief.	Maintenance of lunatics.
1912—1913	... £3,917	... 4/8	... £2,031	... £3,588
1913—1914	... £3,843	... 5/1	... £2,036	... £3,658

The Chelmsford Hospital and Dispensary has 43 beds and serves both the Borough and the Rural District. The Tuberculosis Dispensary for the Chelmsford area is situated in Duke Street, Chelmsford.

B. SANITARY CIRCUMSTANCES OF THE DISTRICT.

I. WATER SUPPLY.

A description of the various waterworks owned by the Council is given in the first part of the report, so that only matters which have been considered during the year require mention.

GREAT BADDOW.—Throughout the year the water from the springs showed no evidence of pollution. The Local Government Board intimated that they were unable to sanction the loan for the installation of mechanical filters for the particular purpose required (purification) unless it was impracticable to provide slow sand filter beds. Towards the end of the year the Council instructed Mr. Dewhirst (Surveyor) to prepare plans, specification, etc., of a slow sand filtration system. During the latter months of the year 11 special connections were made for the use of the troops.

DANBURY AND SIX OTHER PARISHES.—The engine and pump which were capable of raising 3,000 gallons per hour were replaced by a new oil engine of 11 B.H.P. driving a pump of 5,000 gallons per hour. During the year 2,372 yards of 3-inch cast iron mains were laid in the parish of Woodham Ferris. Military huts erected in the parish of Little Baddow have been connected to the main, the Church School has also been connected.

INGATESTONE.—During the year 320 yards of 3-inch cast iron mains were laid. Eight special connections were made for the troops.

ROXWELL. The two groups of cottages at Boyton Cross referred to in last year's report have been provided with an improved supply.

WRITTLE.—An unfortunate breakage in the air-tube of the air-lift pump at a depth of 380 feet caused a total stoppage of these works. By the insertion of a temporary air-tube Mr. Dewhirst was able to renew the supply within 12 hours. A new air-pipe has since been inserted.

As the bored well is not in duplicate and only a day's storage is provided, a serious breakdown in any part of the air-lift might possibly place the district for some considerable time without an available supply. Under these circumstances it would be well for the Council to consider the necessity of having another supply available.

BROOMFIELD.—These waterworks, which were completed during the year, are described in the first part of the report. By the end of the year 56 consumers were being supplied. The first connection was made in April. Twelve special connections were made for the troops.

GREAT WALTHAM.—The 720 feet of defective stoneware pipes which conveyed the water from the spring to the village (near the bridge) have been replaced by that length of 3-in. steel tubes.

BOREHAM.—The Parish Council assisted by private subscriptions carried out considerable improvements to the village water supply. A new collecting tank has been constructed and the water conveyed in iron pipes to the "spout" from which the public obtain the water.

WEST HANNINGFIELD.—During the year a complaint was received regarding the deficiency of water in the parish of West Hanningfield. The parish being sparsely populated and of low rateable value the Council were of opinion that the cost of the provision of a proper water supply would be prohibitive.

Mr. Dewhirst has kindly prepared the following information regarding the total water consumed, etc. :—

WATER SUPPLY, 1914.

During September, 1914, the Corporation of the Borough of Chelmsford approached the Rural District Council with a view to the latter supplying water to the Borough from the works at Broomfield. The Rural District Council, on condition that the Borough made the necessary connections, agreed to supply water during the war at the low figure of 5d. per 1,000 gallons. During the period 6th October to 31st December, 1914, the Borough was supplied on these terms with 3,500,000 gallons.

During the year the following amount of water was supplied from the five principal waterworks :—

Great Baddow	...	...	35,540,000 gallons.
Danbury and other parishes	...	...	18,748,000 „
Ingatestone	...	...	10,939,000 „
Writtle...	...	...	6,282,000 „
Broomfield	...	...	3,848,000 „
Total			75,357,000 „

For any one year this constitutes a record quantity.

New Consumers.

Parish.		Domestic.
Great Baddow	...	9
Little Baddow	...	7
Danbury	...	8
Ingatestone	...	6
East Hanningfield	...	2
Woodham Ferris	...	7
Writtle ...	...	5
Broomfield	...	54

		Trade.	Combined Domestic and Trade.
Woodham Ferris ...	...	—	2
Ingatestone ...	...	1	1
Great Baddow ..	...	1	—
Broomfield ...	...	—	2

II. SEWAGE WORKS AND RIVER POLLUTION.

During the year no complaint was received regarding the effluent from the various sewage works which are described in the first part of this report. The conversion of one of the coke beds into a sedimentation tank at Writtle Sewage Works during 1913 has resulted in a better effluent.

Owing to the large number of troops billeted in Ingatestone an additional 5 acres of land has been utilised at the sewage works during the latter part of the year.

III. CLOSET ACCOMMODATION.

In those parts of the district where there are sewers, privies and pail closets have been abolished and water closets substituted. A considerable number of the latter are of the hand-flushed type.

The following table shows the approximate number of closets of the various types in the district:—

No. of water closets with proper flushing arrangement ...	1,384
No. of water closets hand-flushed	430
No. of pail closets, a small propor- tion of which have an arrange- ment of distributing dry earth	2,697
No. of privies ...	1,331
No. of privies abolished during the year ...	10

In the congested areas of Great Baddow s.d.d., Ingatestone and Fryerning, Widford and Writtle s.d.d., Sections, 39, 40, 41 and 42 of The Public Health Acts Amendment Act, 1907, are applicable.

IV. SCAVENGING.

House refuse is scavenged by contractors in Great Baddow, Ingatestone, and Widford; pail closets in Broomfield, Battlesbridge, Great and Little Waltham. Battlesbridge was scavenged for the first time by contract during the year at an annual cost of £13.

BROOMFIELD.—Pail closets are scavenged twice a week (Mondays and Fridays). Owing to the number of troops billeted in the parish the scavenger received £1. 6s. extra during 1914. House refuse is not removed by contract in this parish, but the conditions are such that the matter requires consideration.

GREAT BADDOW.—Under normal conditions house refuse is removed weekly, but towards the end of the year, owing to the number of troops in the locality, one more collection in the fortnight was carried out at an extra cost of £11 9s.

INGATESTONE.—Owing to the number of troops billeted in the locality three instead of two collections per fortnight were instituted towards the end of the year at an extra cost of £9. 16s.

WRITTLE S.D.D.—At the beginning of 1915 the Council decided to remove house refuse weekly during the time troops are billeted in the locality.

V. SANITARY INSPECTIONS OF THE DISTRICT.

The following table (on page 18) prepared by the Inspector, shows the amount of work done exclusive of that under The Housing and Town Planning, etc. Act, 1909, which is given on page 22.

SUMMARY OF WORK done by the Sanitary Inspector
during the year, under the Public Health Acts.

	Total Number for year.	Notes, Results of Inspection, &c.
1. Complaints received...	31	
2. Nuisances detected without complaint	583	
3. Nuisances abated ...	425	
4. Nuisances remaining unabated ...	189	
5. Formal notices served ...	329	
6. Summonses taken out ...	1	
7. Convictions obtained ...	Nil	
8. Lodging-houses inspected. Frequency of inspection ...	Nil	
9. Slaughter houses inspected. Frequency of inspection ...	17	Quarterly.
10. Bakehouses inspected. Frequency of inspection ...	42	Twice annually.
11. Dairies and Milkshops inspected. Frequency of inspection ...	8	Quarterly.
12. Cowsheds inspected. Frequency of inspection ...	127	Quarterly.
13. No. of samples of milk take for exam- ination for cleanliness, tubercle bacilli, etc. ...	Nil	
14. Filthy houses cleansed, sec. 46 Public Health Act, 1875 ...	6	
15. Houses disinfected ...	93	
16. Overcrowding abated ...	9	
17. Houses erected or re-built for which Water "Certificates" were applied	70	
18. "Certificates" granted ...	23	
19. " " deferred ...	10	
20. Public Wells, total No. in District	54	
21. New Public Wells sunk or improved supplies of Water afforded ...	...	1 supply for 8 houses
22. Wells cleansed or repaired ...	Nil	
23. Wells closed ...	Nil	
24. Privies, No. in District ...	1,331	
25. " " No. abolished during the year	10	
26. Pail Closets, No. in District	2,697	
27. Water closets, No. in District with- out flushing cistern ...	430	
28. Water closets with flushing cisterns ...	1384	
29. Privies and W.C.'s repaired ...	78	
30. Water cisterns cleansed, repaired, or covered ...	Nil	
31. Animals improperly kept removed ...	Nil	
32. Samples of water taken for analysis	12	
33. Compensation paid for destruction of infected bedding ...	Nil	
34. Seizures of unsound meat, &c. ...	Nil	

WILLIAM EDSER,

Inspector of Nuisances.

VI. PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE-LAWS OR REGULATIONS.

The number and character of such premises are given in the Sanitary Inspector's table.

SLAUGHTER HOUSES.—These were specially inspected and reported upon during 1912, but I understand no action has been taken.

COMMON LODGING HOUSES, UNDERGROUND SLEEPING ROOMS, OFFENSIVE TRADES. There are none in the district.

DAIRIES AND COWSHEDS. During the year two cowsheds were added to the register—one being a new construction, the other a converted shed.

The Milk and Dairies Act come into operation on the 1st October, 1915.

BAKEHOUSES. On the whole these premises are fairly well kept. During the year one old building has been replaced by new premises.

Sale of Food and Drugs Acts. Milk and Cream Regulations, 1912, are administered by the County Council.

SCHOOLS.

During the year the Danbury Church School was connected to the Council's water mains.

Owing to the prevalence of infectious diseases the following schools were closed for the periods specified :—

School.		Disease.		Period of Closure.
Great Baddow	...	Scarlet Fever	...	October 5 to 23.
Highwood	...	Diphtheria	...	October 8 to 23.

VII. HOUSING.

The following table (on page 22) gives the particulars required by the Housing (Inspection of District) Regulations, 1910.

A large number of the existing houses of the working classes in the district was erected at a time when there was little or no supervision by Sanitary Authorities, and to-day many of these are in need of extensive repairs and structural alterations; some are barely fit for human habitation, while a few must be considered as totally unfit.

With the great improvements carried out in housing conditions throughout the country, the standard of habitation is likely to advance from year to year. Of the 444 dwelling-houses inspected during the year, 36 were considered unfit for human habitation and representations involving 18 dwelling-houses were made. 19 houses which were considered unfit for human habitation were made habitable, and the Council¹ made 12 closing orders.

The 4 cottages (class B) in Sandon and the 6 cottages (2 class A and 4 class B) in Danbury erected by the Council were completed during March, 1914, and were occupied forthwith. Of the 6 cottages of class B completed in Little Baddow 2 were occupied forthwith, 2 some months later and by the end of the year the remaining 2 were occupied by troops.

The rent of class A is 4/9 per week, that of class B 3/9 per week, rates being included.

During the year the Local Government Board sanctioned a loan for the erection of four cottages in East Hanningfield. The proposed cottages are to be erected in pairs at an estimated cost of £800 (including $\frac{1}{2}$ an acre of land).

Each cottage with walls of brickwork and tiled roof is to contain on ground floor:—Parlour 12ft. 9in. by 8ft. 6in., living room 14ft. by 10ft. 6in., scullery 11ft. by 4ft. 9in., larder (with an external window made to open) 4ft. 9in. by 2ft. 9in. Earth closet and fuel store detached. On first floor:—3 bedrooms (1) 12ft. 9in. by 9ft. 6in., (2) 10ft. 9 in. by 8ft. 3in., (3) 7ft. 9in. by 7ft. 3in., two of the bedrooms being provided with fireplaces. No drains or cesspools are to be provided. Water from the Council's mains and butts for rain water are to be provided.*

Deficiency of housing in Stock, Ingatestone and Springfield Parishes.

The Council have decided to erect cottages at Stock and have entered into a provisional contract for the purchase of a suitable site.

Owing to the deficiency of house accommodation in the parish of Ingatestone dwelling-houses unfit for human habitation are in occupation. In the parish of Springfield two cottages at least could be erected with advantage. The matter of erecting cottages in the latter two parishes has been referred to the Housing Committee for their consideration.

Overcrowding. As the result of action taken by the Council 9 cases of overcrowding were abated.

* On 15th March, 1915, the Council adopted the following recommendation of the Housing Committee:—"That they had considered alternative tenders for the erection of one pair and two pairs of cottages at East Hanningfield, and that, having regard to the circular from the Local Government Board emphasizing the necessity for conserving public money and the labour resources of the country, and bearing in mind the improbability of obtaining a loan for the purpose from the Public Works Loan Board, and the fact that the lowest tender for the work was considerably higher than the estimated cost, owing, no doubt, to the increased cost of materials and labour, they strongly recommend the Council not to proceed with the proposed erection of Workmen's dwellings at East Hanningfield at the present time, but to postpone the work until after the termination of the War, or at any rate, until a more favourable opportunity presented itself."

Parishes.	The Number of Houses inspected for the purposes of Section 17 of the Act of 1909.	The Number of Houses which were considered to be in a state as to be unfit for human habitation.	The Number of representations made to the Local Authority with a view to closing orders being made.	The number of Closing Orders made.	The Number of Houses the defects in which were remedied without closing orders being made.	The Number of Houses, which after Closing Orders were put into a state fit for habitation	The general character of the defects found to exist.
INGATESTONE ..	269	16	9	9	7	Nil	Defective Walls,
GREAT BADDOW ..	65	3	Nil	Nil	3	Nil	Windows and
BROOMFIELD ..	48	2	Nil	Nil	2	Nil	Spouting.
WRITTLE .. COOKSMILL GREEN	16	3	1	Nil	Nil	Nil	Insufficient light
WRITTLE .. RADLEY GREEN	4	4	Nil	Nil	4	Nil	and ventilation.
GREAT WALTHAM NORTH END.	18	Nil	Nil	Nil	Nil	Nil	—
ROXWELL .. COOKSMILL GREEN.	16	Nil	Nil	Nil	Nil	Nil	—
RETTENDON ..	5	5	5	5	Nil	Nil	—
RUNWELL ..	1	1	1	Nil	1	Nil	—
STOCK ..	2	2	2	2	Nil	Nil	—
Totals ..	444	36	18	16	17	Nil	—

C. SANITARY ADMINISTRATION.

The Staff is given in the first part of the report. The work of the Inspector of Nuisances in addition to his statutory duties, includes the inspection of dwelling-houses under and for the purposes of Section 17 of the Housing and Town Planning, etc. Act, 1909.

One of the conditions of his appointment is that he maintains a motor cycle.

Hospital accommodation. The existing accommodation is given in the first part of the report. During the latter part of the year tents had to be erected as the accommodation proved insufficient. At present tents provide the only available accommodation for Enteric Fever patients.

At the beginning of 1915 the Military Authorities were erecting at the Isolation Hospital for the joint use of the Military and civil population, an asbestos pavilion of the most modern type.

Adoptive Acts, Bye-laws and Regulations in force in the district are given in the first part of the report. During the year new Bye-laws with respect to New Streets and Buildings were approved by the Local Government Board.

Chemical and Bacteriological Work. Arrangements have been made for the Medical Officer of Health to carry out this work. During the year a number of samples were examined.

D. PREVALENCE OF AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

The number of cases of acute infectious diseases exclusive of Measles and Chicken Pox notified during the year was 90, which is lower than the averages for the last fifteen years, the latter being 130. The following table gives the number of notifications received, classified according to disease and parish.

DISTRIBUTION OF INFECTIOUS DISEASES DURING THE
YEAR 1914.

	Diphtheria.	Erysipelas.	Scarlet Fever.	Enteric Fever.	Cerebro Spinal Meningitis.	Pulmonary Tuberculosis.	Other forms of Tuberculosis.	Measles.	Chicken Pox.	Total.
<i>Ingatestone Sub-District</i>										
Stock and Buttsbury	0	0	0	0	0	1	2	6	1	10
East Hanningfield ...	2	0	3	0	0	0	0	0	0	5
West Hanningfield ..	0	0	0	0	0	0	0	0	0	0
South Hanningfield	0	0	0	0	0	2	1	0	0	3
Ingatestone and Fryerning...	0	0	3	0	0	2	1	0	1	7
Margaretting ...	0	0	4	0	0	2	0	0	0	6
Rettendon ...	0	0	0	0	1	1	0	0	0	2
Runwell ...	1	0	1	0	0	1	0	1	0	4
Woodham Ferris ...	2	1	3	0	0	4	0	0	0	10
<i>Chelmsford Sub-District</i>										
Widford ...	0	0	1	*1	0	1	0	0	0	3
Writtle ...	8	0	7	0	0	1	0	0	0	16
Roxwell ...	0	0	0	0	0	0	0	0	0	0
<i>Great Waltham Sub-District—</i>										
Boreham ...	0	0	0	0	0	1	0	0	1	2
Broomfield ..	0	0	1	0	0	1	0	0	0	2
Chigwall ...	0	0	1	0	0	0	0	0	4	5
Good Easter...	0	1	3	0	0	1	0	0	18	23
Great Leighs ...	0	0	0	1	0	0	1	1	0	3
Little Leighs ...	0	0	0	0	0	0	0	0	0	0
Great Waltham ...	0	0	0	1	0	1	1	0	0	3
Little Waltham ...	0	0	1	0	0	0	0	0	0	1
Mashbury ...	0	0	1	0	0	1	0	0	7	9
Pleshey ...	0	0	0	0	0	0	0	0	0	0
<i>Great Baddow Sub-District—</i>										
Danbury ...	0	1	1	0	0	0	0	0	0	2
Great Baddow ..	1	2	35	0	0	4	2	0	0	44
Sandon ...	0	0	0	0	0	0	1	0	0	1
Springfield ...	0	0	2	0	0	0	0	0	0	2
Little Baddow ...	0	0	0	0	0	1	0	0	0	1
Total ...	14	5	†67	3	1	25	9	8	32	164

*Was notified as suffering from Paratyphoid Fever.

†Includes 9 cases among the troops—Margaretting 1, Woodham Ferris 1, Writtle 3, Broomfield 1, and Great Baddow 3.

During February, 1914, the Local Government Board issued Regulations under Sections 130, Public Health Act, 1875, providing for the compulsory notification by medical practitioners and certified midwives of cases of Ophthalmia Neonatorum commencing in infants within twenty-one days from the date of their birth on whom they are in attendance. The Order requires the medical practitioner in attendance to give the name and address of the parent of the child, the date of its birth, and the date of onset of the disease. The Order came into operation on 1st April, 1914.

During the year no cases were notified.

MEASLES AND CHICKEN POX.

On 29th September, 1914, the Council passed the following resolution:—"That the Rural District Council of Chelmsford do hereby in pursuance of the Infectious Disease (Notification) Act, 1889, order that for a period of six months from 2nd day of October, 1914, the provisions of the Infectious Disease (Notification) Act, 1889, shall apply to the infectious diseases known as Chicken Pox and Measles." The Local Government Board approved of the above resolution.

During the period 2nd October to 31st December, 8 cases of Measles and 32 of Chicken Pox were notified. The local distribution of the cases is seen in the table on page 25.

ENTERIC FEVER.

Only three cases came under observation and two of these were undoubtedly infected outside the district. The third case was notified as Paratyphoid Fever, the blood although reacting to Paratyphoid B. failed to give a reaction with Typhoid Bacilli. Clinically there was some doubt as to the diagnosis.

DIPHTHERIA.

Fourteen cases were notified, the local distribution being given in the Table on page 25. Two cases in East Hanningfield were associated with insanitary conditions which have since been remedied. The case notified from Runwell occurred in a travelling van and was infected outside the district. The eight cases in the parish of Writtle occurred in the Highwood area. The first intimation was received on 3rd October from the School Medical Officer to the effect that he had found two children in attendance at Highwood School suffering from Diphtheria (bacteriologically). These are included among the notified cases. From enquiries carried out between 3rd and 6th October, I was satisfied the disease in a mild form was prevalent among school children, and on the latter date Diphtheria Bacilli were isolated from the throats of four children in attendance. After consultation with the School Medical Officer the School was closed from 6th to 26th October. On 19th October, of 17 swabs taken from children associated with the School, five were found to be harbouring Diphtheria Bacilli in their throats. All known "carriers" were excluded from school until proved to be free of infection. With the above administrative action the epidemic quickly abated.

SCARLET FEVER.

67 cases were notified, 9 being among the troops. With the exception of the epidemic in the parish of Great Baddow there was no special prevalence in any particular locality. The cases in East Hanningfield were probably responsible for those in Woodham Ferris, the first person to contract the disease in the latter parish was a near relative of the family infected in the former.

The important part played by mild unrecognised cases of Scarlet Fever is well illustrated by the epidemic which occurred during September and October in Great Baddow. The first

two cases notified were members of the same household and were found to have been infected by one of the troops billeted with the family. At that time he was suffering from a mild unrecognised attack of the disease. During the course of the epidemic no fewer than seven children (some in attendance at school) were found suffering from unrecognised attacks of Scarlet Fever—the parents being of the opinion that the children were suffering from “colds.” After the isolation of these potential sources of infection what threatened to be a serious epidemic quickly subsided.

CEREBRO-SPINAL MENINGITIS.

Only one case was notified. The symptoms of this disease resemble those of Tubercular Meningitis, and as the patient notified had suffered from discharging ears there is a possibility of a mistaken diagnosis.

E. PREVALENCE OF AND CONTROL OVER TUBERCULOSIS.

The number of cases of Tuberculosis notified during 1914 was 34—Pulmonary 25, other forms 9. These are classified according to age and sex in the following table:—

PULMONARY TUBERCULOSIS.

	0-1.	1-5.	5-15.	15-25.	25-35.	35-45.	45-65.	65 & over.	Totals.
Males	2	4	3	3	1	1	14
Females	2	2	2	2	2	1	11
	—	—	—	—	—	—	—	—	—
Totals	4	6	5	5	3	2	25

NON-PULMONARY TUBERCULOSIS.

Males	..	..	..	..	1	..	1	..	2
Females	1	2	..	2	..	1	..	1	7
	—	—	—	—	—	—	—	—	—
Totals	1	2	..	2	1	1	1	1	9
Grand Totals	1	2	4	8	6	6	4	3	34

The local distribution of the cases notified is given in the Table on page 25.

The administrative action taken on receiving a notification was fully given in last year's annual report.

Notifications on Forms C and D are not being regularly received.

After the removal to an institution or the death of a patient suffering from Tuberculosis the infected house is fumigated with sulphur vapour or sprayed with Formalin.

As the District Council is mainly responsible for the prevention and the County with the treatment of Tuberculosis close co-operation between these two Authorities is essential. For this purpose the District Council might approach the County Council with a view to the latter allowing their assistant Tuberculosis Officer being appointed nominally assistant to the District Medical Officer of Health, as recommended by the Local Government Board in their Memorandum of 6th December, 1912.

This would ensure uniformity and co-operation.

F. Investigation of Other Diseases.

No outbreak of food poisoning occurred during the year.

Only one death occurred as the result of Diarrhœa.

Of the 34 deaths from Bronchitis, 27 occurred among persons over 65 years of age.

There was no prevalence of the non-notifiable acute Infectious diseases,

G. Means for Preventing Mortality in Childbirth and in Infancy.

As the district is sparsely populated and the infantile mortality low the Council have decided that it is unnecessary to adopt the Notification of Births Act, 1907.

The Midwives Act, 1902 is administered by the County Council.

H. Vital Statistics of the District.

BIRTH RATE. During the year there were 441 births equivalent to an annual birthrate of 18.7 per 1,000 of the estimated population. This is the lowest on record.

INFANT MORTALITY. Only 16 deaths occurred among children under one year of age, which is equivalent to 36.3 per 1,000 births. This exceptionally low rate is a record for the district.

Table iv. (of L.G.B.) on page 35 gives a detailed classification of the nett deaths from stated causes at various ages under one year of age.

DEATH RATE The general death rate per 1,000 of the estimated population is 11.9 which can be considered very satisfactory. As the death rate is influenced by the age and sex incidence of the population the Registrar General furnishes a standardizing factor (.8243 for Chelmsford R.D.) which, multiplied by the death rate (crude) of the district, gives the standardized death rate, namely, which would have occurred in the district had the population been the same as regards sex and age as that of England and Wales at the census 1901. By this means we are able in the following Table to compare the Death Rate of the district with those of specified areas in the Country.

	Annual rate per 1,000 living.			Deaths under 1 year to 1,000 births.
	Births.	Deaths.		
		Crude.	Stand-ardized.	
England and Wales	23.6	13.9	13.6	105
97 Great Towns including London	24.9	14.6	14.9	113
145 Smaller Towns	23.6	12.8	12.9	104
London	24.6	14.4	14.4	103
England and Wales <i>less</i> the 242 Towns	21.9	13.3	12.2	93
Administrative County of Essex..	22.9	11.4	11.0	?
Maldon R.D.	21.1	12.2	9.7	54.6
Rochford R.D.	20.5	12.2	10.6	53.0
Chelmsford R.D.	18.7	11.9	9.8	36.3

The above table shows the death rate in the Chelmsford Rural District to be much lower than throughout the country generally.

DEATHS FROM INFECTIOUS DISEASES. The only deaths recorded from infectious diseases, were 1 from Paratyphoid Fever, 2 from Whooping Cough, 2 from Cerebro Spinal Meningitis (there was some doubt as to the diagnosis of one of these cases while the other death took place outside the district).

TUBERCULOSIS. There were 16 deaths from Pulmonary and 2 from Non-Pulmonary Tuberculosis.

CANCER. There were 21 deaths from malignant disease as against 31 the previous year.

Nearly 60 per cent of the deaths occurring in the district were among persons over 65 years of age.

TABLE I.

CHELMSFORD RURAL DISTRICT.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1914 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.					
		Un-corrected Number.	Nett.	Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 year of age		At all ages.			
								Number.	Rate per 1,000 Net Births.				
1	2	3	4	5	6	7	8	9	10	11	12	13	
1909	22,360	471	471	21.6	226	10.1	2	41	35	74.0	265	11.8	
1910	22,770	438	438	19.2	260	11.4	8	25	42	96.0	277	12.2	
1911	22,830	481	486	21.3	234	10.2	3	44	42	86.4	275	12.0	
1912	23,080	510	517	22.4	232	10.5	6	47	38	73.5	273	11.8	
1913	23,223	520	525	22.6	239	10.3	14	36	31	59.0	261	11.2	
1914	23,503	438	441	18.7	219	9.3	6	68	16	36.3	281	11.9	
Area of District in acres (land and inland water), 82,045.										Total population at all ages, 22,791			} At Census, 1911.
										Total families or separate occupiers, 5,575			

TABLE II.

CHELMSFORD RURAL DISTRICT.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1914.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							TOTAL CASES NOTIFIED IN EACH LOCALITY (e.g. Parish or Ward) of the District.					TOTAL CASES REMOVED TO HOSPITAL
	At all Ages	At Ages—Years.						1. Ingate- stone.	2. Chelms- ford.	3. Great Waltham.	4. Great Baddow.		
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65					65 and upwards	
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera and Plague .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup) .. ..	..	1	9	2	2	2	..	..	5	8	3	10	..
Erysipelas	14	7	44	11	5	4	..	..	8	1	38	59	..
Scarlet Fever	5	..	..	..	1	..	..	..	1	6	..	..	..
Typhus Fever	67	..	..	..	..	..	..	..	..	2	..	..	..
Enteric Fever	3	..	1	1	1	..	..	..	..	..	..	2	..
Relapsing Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis ..	1	..	1	..	..	..	..	..	1	..	..	..	..
Polio-myelitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis ..	25	..	4	6	10	3	2	1	2	5	5	..	..
Other forms of Tuberculosis ..	9	1	..	2	2	1	1	..	4	2	3	..	..
Measles	8	..	5	2	..	..	..	..	7	1	..	..	..
Chicken Pox	32	..	25	..	1	..	..	..	2	3	..	..	..
Totals	164	1	17	89	24	22	8	3	44	16	55	49	71

Isolation Hospital :—Chelmsford Joint Hospital, Great Baddow, Total available beds, 21.

Number of diseases that can be concurrently treated, 2.

Also Small-Pox Hospital, 4 beds at Galleywood, used for early cases of Tuberculosis.

TABLE III.

CHELMSFORD RURAL DISTRICT—CAUSES OF, AND AGES AT, DEATH DURING YEAR 19

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF RESIDENTS WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON- RESIDENTS" IN INSTITUTIONS IN THE DISTRICT.
1		All ages.	Under 1.	1 and 2.	2 and under 5.	5 and 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards.		
		2	3	4	5	6	7	8	9	10	11	
All causes	{ Certified Uncertified	280 1	16	4	1	8	7	38	47	159 1	4 ...	
Enteric Fever	...	1	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	2	...	1	...	1	...	...	...	...	...
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	1	...	...	...	...	...	...	...	1	...
Erysipelas	...	1	...	...	...	...	...	...	1	1	...
Phthisis (Pulmonary Tuberculosis)	...	16	...	...	...	1	3	10	1	1	3
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	2	1	...	...	...	...	1	7	13	...
Cancer, Malignant Disease	...	21	...	...	...	1	...	...	...	...	...
Rheumatic Fever	...	1	...	...	...	1	...	2	...	...	...
Meningitis	...	3	...	...	...	1	...	...	...	...	...
Organic Heart Disease	...	36	...	...	...	1	...	...	9	...	...
Bronchitis	...	34	2	2	1	...	1	4	1	22	...	
Pneumonia (all forms)	...	9	...	...	...	2	1	...	1	27	...
Other Diseases of Respiratory Organs	...	...	...	...	...	...	...	4	1	1	...
Diarrhoea and Enteritis	...	1	1	...	...	...	...	...	...	...	...
Appendicitis and Typhlitis	...	2	...	...	...	1	...	1	1	...	...
Cirrhosis of Liver	...	4	...	...	...	...	...	...	2	...	...
Alcoholism	...	2	...	...	...	...	...	...	2	...	...
Nephritis and Bright's Disease	...	5	...	...	...	...	...	...	3	2	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...
Other accidents & diseases of Preg. & Parturition	...	...	...	...	...	...	...	...	...	...	...
Congen. Debility & Malforma. includ. Prema. Birth	...	7	6	1	...	...	...	...	...	...	...
Violent Deaths, exclu ling Suicide	...	4	1	...	...	...	...	1	1	1	...
Suicide	...	1	...	...	...	...	...	1	10	87	...
Other Defined Diseases	...	122	5	...	...	1	1	1	18	3	...
Diseases ill-defined or unknown	...	6	...	...	...	...	...	...	2	...	...
TOTALS	...	281	16	4	1	8	7	38	47	160	4	
Cerebro-Spinal Meningitis	...	2	...	...	...	1	...	1	...	...	...

TABLE IV.

CHELMSFORD RURAL DISTRICT — INFANT MORTALITY DURING THE YEAR 1914.

Nett Deaths from stated causes at various Ages under 1 Year of age.

Cause of Death.	Under 1 week	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under One Year.
All Causes { Certified ... Uncertified ...	2	..	..	2	4	3	3	4	2	16
Small-pox
Chicken-pox
Measles
Scarlet Fever
Diphtheria and Croup
Whooping Cough
Erysipelas
Tuberculous Meningitis
Abdominal Tuberculosis	1	1	..	..	1
Other Tuberculous Diseases	1	1	2	..	4
Meningitis (<i>not Tuberculous</i>)	1	..	..	..	1
Convulsions	1	..	..	1	2
Laryngitis
Bronchitis
Pneumonia (all forms)	1	..	1
Diarrhoea
Enteritis
Gastritis
Syphilis
Rickets
Suffocation, overlying
Injury at Birth
Atelectasis	1	1	..	..	..	..	1
Congenital Malformations	1	..	..	1	2	1	..	..	1	3
Premature Birth ..	1	..	..	..	1	..	..	..	..	2
Atrophy, Debility, and Marasmus	1	1	..	2
Other Causes
TOTALS ..	2	..	..	2	4	3	3	4	2	16

Nett Births in the year { legitimate, } 427.
 illegitimate, } 14.

Nett Deaths in the year of { legitimate infants, } 15.
 illegitimate infants, } 1.

TABLE VI.
FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES,
AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Inspector of Nuisances.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions
Factories ... (Including Factory Laundries)	9	—	—
Workshops ... (Including Workshop Laundries)	44	—	—
Workplaces ..	40	—	—
Total. .	93	—	—

2. —DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts—</i>				
Want of cleanliness	—	—	—	Nil
Want of ventilation	—	—	—	Nil
Overcrowding	—	—	—	Nil
Want of drainage of floors	—	—	—	Nil
Other nuisances	—	—	—	Nil
Sanitary { insufficient	—	—	—	Nil
accommodation { unsuitable or defective	—	—	—	Nil
{ not separate for sexes	—	—	—	Nil
<i>Offences under the Factory & Workshop Act.</i>				
Illegal occupation of underground bake-house	—	—	—	Nil
Breach of special sanitary requirements for bakehouses	—	—	—	Nil
Other Offences	—	—	—	Nil
Total... ..	—	—	—	Nil

TABLE VI.—*continued.*

FACTORIES, WORKSHOPS, LAUNDRIES, ETC.

Workshops on the Register (s. 131) at the end of the year. (1)					Number. (2)
Important classes of workshops, such as workshop bake- houses, may be enu- merated here.	{	Bakehouses	...	...	36
		Carpenters Shop	...	...	29
		Blacksmith	...	...	36
		Boot Repairing Shop	...	...	22
		Harness Shop	...	...	7
		Dressmaking	...	...	8
		Cycles, &c.	...	...	6
		Wheelwright	...	...	29
		Painters and Plumbers	...	...	16
		Laundries	..	...	7
Total number of Workshops on Register					196
5.—OTHER MATTERS.					
Class. (1)					Number (2)
Matters notified to H.M. Inspector of Factories:—					Nil
Failure to affix Abstract of Factory and Workshop Act, 1901 (s. 133)					Nil
Action taken in matters referred by H.M. Inspector as remediable under Public Health Acts, but not under the Factory and Work- shop Act (s. 5, 1901)					Nil
					Notified by H.M. Inspector
					Reports (of action taken) sent to H.M. Inspector ...
Others					Nil
Underground Bakehouses (s. 101):—					
In use at the end of the year					Nil

APPENDIX.

Billeting of Troops in the District.

The populous area of the parish of Writtle is selected as illustrating the conditions under which troops have been billeted in the district.

The following is a summary of the more important recommendations relating to the billeting of troops :—

- (1) The accommodations which may be demanded is—

For an officer ... Lodging and attendance.

For a soldier ... Lodging attendance and food.

“ Lodging ” implies a separate bed.

- (2) The convenience of persons on whom billeting notices may be served should be regarded as far as possible.
- (3) Without the full consent of the occupants' (a) Houses in which only women with or without children are living ; (b) Houses of officers or soldiers who are absent on duty and whose families are left unprotected are not to be utilised.
- (4) The houses of substantial householders should be first utilised, and poorer districts should be avoided.
- (5) Exclusive of kitchen and offices not more than one man to every two rooms should be allotted, occupants should not be deprived of the bedrooms they habitually use.
- (6) Before proceeding to allot billets Chief Officers of Police should consult the Medical Officer of Health of the district.

- (7) Where necessary field latrines should be constructed up to a scale of 4 seats per 100 men. Proper sanitary arrangements must be made with the local authorities, including those for sewer connections, or for removal of excreta or urine.
- (8) Officers must inspect all billets before entry and on final vacation.
- (9) The inspection of billets by Company officers should be carried out with great regularity, special attention being paid to the state in which the bedding is kept and the general cleanliness of the rooms set apart for the soldiers.

In the particular area selected, only billets in private dwelling houses are considered; buildings totally occupied by the military being excluded. Out of 293 houses, 193 were selected as suitable billets. The following table gives the number of rooms exclusive of kitchen and offices (effective bedrooms) in the houses.

Number of Rooms exclusive of Kitchen.								
1	2	3	4	5	6	7	8 & over	Totals
Number of Houses selected for Billets.								
—	2	45	23	90	16	14	3	193
Number of Houses disregarded for Billets.								
1	6	50	16	21	5	1	—	100
Totals 1	8	95	39	111	21	15	3	293

Taking the above 193 as the total houses suitable as billets, only 375 soldiers could be accommodated within the limit suggested (exclusive of kitchen and offices not more than one soldier to every two rooms), whereas it was necessary to find accommodation for 614. The following table gives in detail the relation between the number billeted and the room accommodation.

Average number of soldiers billeted per room (exclusive of kitchen).	Number of rooms exclusive of kitchen.								Totals	Per- centage of total soldiers billeted.
	1	2	3	4	5	6	7	8 & over		
	Number of soldiers billeted.									
Up to and including $\frac{1}{2}$	—	1	5	23	52	19	12	2	114	18·6
Over $\frac{1}{2}$ but not 1	...	—	46	18	165	30	37	16	312	50·9
1 per room	...	—	2	33	16	50	12	—	113	18·4
Over 1 but not 2	...	—	20	5	44	—	—	—	69	11·2
Over 2 but not 3	...	—	6	—	—	—	—	—	6	·9
Totals	...	3	110	62	311	61	49	18	614	100·0

The table should be read as follows: Of the soldiers billeted with an average number of $\frac{1}{2}$ or less per room, 1 was in a house of 2 rooms, 5 were in houses of 3 rooms, 23 were in houses of 4 rooms and so on, making a total of 114 or 18.6 per cent of the total soldiers billeted.

In order to compare the conditions existing in the selected houses before and after the soldiers were billeted, the following two tables have been prepared—the first relating to the former and the second to the latter.

In the 193 selected houses prior to billeting.

Average number of persons per room exclusive of kitchen.	Number of rooms exclusive of kitchen.								Total Population	Percentage of the population of these houses.	
	1	2	3	4	5	6	7	8 & over			
	Population.										
Up to and including $\frac{1}{2}$	—	—	2	14	60	15	25	11	127	19.6	
Over $\frac{1}{2}$ but not 1	...	—	35	26	147	35	20	—	263	40.5	
1 person per room	...	—	36	20	50	6	.	—	112	17.2	
Over 1 but not 2	...	—	52	16	42	5	5	—	120	18.5	
2 but not 3		9	18	—	—	—	—	—	27	4.2	
Totals	...	—	9	143	76	299	61	50	11	649	100.0

In the 193 selected houses after the soldiers were billeted.

Average number of persons per room exclusive of Kitchen.	Number of rooms exclusive of kitchen.								Total Popu- lation.	Per- centage of new popu- lation of these houses.
	1	2	3	4	5	6	7	8 & over		
	Population.									
Up to & including $\frac{1}{2}$	—	—	—	—	—	—	—	5	5	·4
Over $\frac{1}{2}$ but not 1 ...	—	—	—	—	28	14	27	—	69	5·4
1 person per room	—	—	9	16	65	18	28	—	136	10·8
Over 1 but not 2 ..	—	—	95	88	438	70	44	24	759	60·1
2 but not 3 ...	—	5	140	34	79	20	—	—	278	22·0
3 but not 4 ...	—	7	9	—	—	—	—	—	16	1·3
Totals ...	—	12	253	138	610	122	99	29	1263	100·0

The first table shows that in the houses selected as billets, 4.2 per cent of the population were living with an average of 2 or more persons per room (exclusive of kitchen), and the second shows that in the same houses after the soldiers were billeted, 23.3 per cent of the population was living with an average of 2 or more persons per room.

In order to compare the conditions existing in the disregarded, and selected houses, the following table has been prepared.

In the 100 houses disregarded as billets.

Average number of persons per room exclusive of kitchen.	Number of rooms exclusive of kitchen.								Total Population	Percentage
	1	2	3	4	5	6	7	8 & over		
	Population.									
Up to and including $\frac{1}{2}$...	—	2	3	11	15	8	—	—	39	10·1
Over $\frac{1}{2}$ but not 1 ...	—	2	24	3	12	—	4	—	45	11·7
1 person per room ...	—	4	39	12	20	6	—	—	81	21·0
Over 1 but not 2 ...	—	—	62	22	30	10	—	—	124	32·1
2 but not 3 ...	—	5	60	22	10	—	—	—	97	25·1
Totals ..	—	13	188	70	87	24	4	—	386	100·0

The above table shows that in these houses 25·1 per cent of the population were living with an average of 2 or more persons per room (exclusive of kitchen) or worse than the conditions in the selected houses after the soldiers had been billeted. From this it may be inferred that reasonable care was exercised in selecting the billets.

Representations made to the Military Authorities relating to overcrowding, etc., have always been acted upon.

The area of Writtle under consideration is provided with sufficient water supply, drainage, sewerage and sewage disposal, and recently the Council have made arrangements for a weekly collection and removal of house refuse.

Cases of infectious diseases occurring among the troops are isolated by the civil Local Authorities.

The disinfection of clothing, etc., is undertaken at the Isolation Hospital.

